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| APPLICATION NO.                                | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | ATTORNEY DOCKET NO. CONFIRMATION NO. |  |
|--|-------------|----------------------|-------------------------|--------------------------------------|--|
| 09/737,050                                     | 12/14/2000  | Christopher Tate     | 583-1044                | 7139                                 |  |
| 7590 01/02/2004                                |             |                      | EXAMINER                |                                      |  |
| Lee, Mann, Smith, McWilliams, Sweeney & Ohlson |             |                      | SHELEHEDA, JAMES R      |                                      |  |
| PO Box 2786<br>Chicago, IL 60                  | 0690-2786   |                      | ART UNIT PAPER NUMBER   |                                      |  |
| 0 .  |             | • .                  | 2614                    |                                      |  |
|  |             |                      | DATE MAILED: 01/02/2004 | (0)                                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Auntication No.   | Applicant/o)  |  |  |  |
|--|---|---|--|--|--|
|  | Application No.   | Applicant(s)  |  |  |  |
| Office Action Summers  | 09/737,050  | TATE ET AL.   |  |  |  |
| Office Action Summary  | Examiner  | Art Unit  |  |  |  |
|  | James Sheleheda   | 2614  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply   |   |   |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period vortice to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status | 36(a). In no event, however, may a reply by within the statutory minimum of thirty (30) will apply and will expire SIX (6) MONTHS for cause the application to become ABANDO  | e timely filed  days will be considered timely.  rom the mailing date of this communication.  DNED (35 U.S.C. § 133).                                       |  |  |  |
| Responsive to communication(s) filed on  | _·  |   |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This   | action is non-final.  |   |  |  |  |
| 3) Since this application is in condition for allowar<br>closed in accordance with the practice under E  |   |   |  |  |  |
| Disposition of Claims  |   |   |  |  |  |
| 4) ☐ Claim(s) 1-25 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-25 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o   | wn from consideration.  |   |  |  |  |
| Application Papers   | ·   |   |  |  |  |
| 9) The specification is objected to by the Examine 10) The drawing(s) filed on 14 December 2000 is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11.  | re: a)⊠ accepted or b)⊡ obj<br>drawing(s) be held in abeyance.<br>tion is required if the drawing(s) is   | See 37 CFR 1.85(a).<br>objected to. See 37 CFR 1.121(d).  |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120  |   |   |  |  |  |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list 13) Acknowledgment is made of a claim for domesti since a specific reference was included in the first 37 CFR 1.78.  a) The translation of the foreign language pro 14) Acknowledgment is made of a claim for domesti reference was included in the first sentence of the           | s have been received. s have been received in Applicative documents have been received in Application (PCT Rule 17.2(a)). of the certified copies not receive priority under 35 U.S.C. § 11 st sentence of the specification povisional application has been in priority under 35 U.S.C. §§ 1 | cation No eived in this National Stage eived. 9(e) (to a provisional application) or in an Application Data Sheet. received. 20 and/or 121 since a specific |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)   | 5) Notice of Inform   | nary (PTO-413) Paper No(s)<br>al Patent Application (PTO-152)   |  |  |  |
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#### **DETAILED ACTION**

### Claim Objections

1. Claims 11-13 are objected to because of the following informalities: Claim 11 is incorrectly dependent upon itself. Based upon the formatting of applicants other claims, it is assumed that claims 11-13 are in fact meant to be dependent upon claim 10. In claims 11-13, line 1, "claim 11" should be changed to –claim 10--. Appropriate correction is required.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1, 10, 14, 18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blahut et al. (Blahut)(5,446,490), in view of Budow et al. (Budow)(5,521,631).

As to claim 1, Blahut discloses a system for streaming data comprising: a content providing server (programming center 121 and program library 122) capable of storing content and communicating the content to at least a first and second recipient subscribers (104) via a communications network (column 3, lines 38-58), and a distribution server (ITV Server, 120 and Headend Equipment, 101) coupled in-line

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between the content providing server and the at least first and second recipient subscribers (see Fig. 1), wherein the distribution server is arranged to **generate** at least a first and a second onward data streams and **transmit** the at least the first and second onward data streams to the at least the first and second recipient subscribers, respectively (column 8, lines 38-45 and lines 50-56), in response to an incoming data stream received from the content providing server and corresponding to the content (column 3, lines 38-42), **wherein** the at least first and second onward data streams **correspond** substantially to the content (column 8, lines 15-63) and are **offset** in time with respect to each other by a respective offset value (see Fig. 5). While Blahut discloses at least a first and second recipient subscriber receiving transmissions from the distribution server, he fails to specifically disclose wherein the recipient subscribers are servers.

Budow discloses a video distribution system wherein video broadcast from a distribution center (Fig. 1, 2a) is received by recipient servers (Fig. 2, video server 12, column 6, lines 40-57), at each location, for the advantage of allowing customers more control over and interaction with the video programming (column 4, lines 44-48).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Blahut's system to include the use of recipient servers, as taught by Budow, for the advantage of allowing customers more control over and interaction with the video programming.

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As to claim 10, Blahut discloses a method of streaming data between a content providing server (programming center 121 and program library 122) and at least a first and a second recipient subscribers (104, column 3, lines 59-65) the method comprising the steps of: **receiving** an incoming data stream corresponding to content (column 3, lines 38-42), **generating** at least a first and a second onward data streams (column 8, lines 38-45 and lines 50-56), and **transmitting** the at least the first and second onward data streams to the at least the first and second recipient subscribers, respectively, in response to an incoming data stream (column 8, lines 38-45 and lines 50-56), **wherein** the at least first and second onward data streams **correspond** substantially to the content (column 8, lines 15-63) and are **offset** in time with respect to each other by a respective offset value (see Fig. 5). While Blahut discloses at least a first and second recipient subscribers receiving data streams, he fails to specifically disclose wherein the recipient subscribers are servers.

Budow discloses a video distribution method wherein video broadcast from a distribution center (Fig. 1, 2a) is received by recipient servers (Fig. 2, video server 12, column 6, lines 40-57), at each location, for the advantage of allowing customers more control over and interaction with the video programming (column 4, lines 44-48).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Blahut's method to include the use of recipient servers, as taught by Budow, for the advantage of allowing customers more control over and interaction with the video programming.

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As to claims 14 and 22, Blahut discloses a computer executable software code stored on a computer readable medium (wherein ITV Server, 120 and Headend Equipment, 101 must inherently include a program code in some storage to operate), the code being for streaming data between a content providing server (programming center 121 and program library 122) and at least a first and a second recipient subscribers (104, column 3, lines 59-65) the code comprising: code to receive an incoming data stream corresponding to content (column 3, lines 38-42), code to generate at least a first and a second onward data streams (column 8, lines 38-45 and lines 50-56), code to transmit the at least the first and second onward data streams to the at least the first and second recipient subscribers, respectively, in response to an incoming data stream (column 8, lines 38-45 and lines 50-56), wherein the at least first and second onward data streams correspond substantially to the content (column 8, lines 15-63) and are offset in time with respect to each other by a respective offset value (see Fig. 5). While Blahut discloses at least a first and second recipient subscribers receiving data streams, he fails to specifically disclose wherein the recipient subscribers are servers.

Budow discloses a video distribution system wherein video broadcast from a distribution center (Fig. 1, 2a) is received by recipient servers (Fig. 2, video server 12, column 6, lines 40-57), at each location, for the advantage of allowing customers more control over and interaction with the video programming (column 4, lines 44-48).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Blahut's system to include the use of recipient servers,

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as taught by Budow, for the advantage of allowing customers more control over and interaction with the video programming.

As to claim 18, Blahut discloses a computer (ITV Server, 120 and Headend Equipment, 101) for streaming data between a content providing server (programming center 121 and program library 122) and at least a first and a second recipient subscribers (104, column 3, lines 59-65), comprising memory having at least one region for storing computer executable program code (wherein any computer server must inherently include a program code in some storage medium to operate), and a processor (In ITV server, 120; column 3, lines 59-65), for executing the program code stored in memory wherein the program code includes: code to receive an incoming data stream corresponding to content (column 3, lines 38-42), code to generate at least a first and a second onward data streams (column 8, lines 38-45 and lines 50-56), code to transmit the at least the first and second onward data streams to the at least the first and second recipient subscribers, respectively, in response to an incoming data stream (column 8, lines 38-45 and lines 50-56), wherein the at least first and second onward data streams correspond substantially to the content (column 8, lines 15-63) and are offset in time with respect to each other by a respective offset value (see Fig. 5). While Blahut discloses at least a first and second recipient subscribers receiving data streams, he fails to specifically disclose wherein the recipient subscribers are servers.

Budow discloses a video distribution system wherein video broadcast from a distribution center (Fig. 1, 2a) is received by recipient servers (Fig. 2, video server 12,

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column 6, lines 40-57), at each location, for the advantage of allowing customers more control over and interaction with the video programming (column 4, lines 44-48).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Blahut's system to include the use of recipient servers, as taught by Budow, for the advantage of allowing customers more control over and interaction with the video programming.

4. Claims 2, 11, 15, 19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blahut and Budow as applied to claims 1, 10, 14, 18 and 22 above, and further in view of Debey (5,701,582).

As to claims 2, 11, 15, 19 and 23, while Blahut and Budow disclose the generating of first and second onward data streams, they fail to specifically disclose wherein data streams are generated prior to receipt of all of an incoming data stream.

Debey discloses the transmission of digital programming streams (column 14, lines 22-36), received at A/V digitizing units, (72 in Fig. 7A, column 13 lines 64-67 and column 14, lines 1-21), which are generated prior to receipt of all of an incoming data stream (column 14, lines 22-36), for the typical advantage of transmitting live television feeds to viewers as they are received.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Blahut and Budow's system to include wherein data streams are generated prior to receipt of all of the incoming data stream, as taught by

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Debey, for the typical advantage of transmitting live television feeds to viewers as they are received.

5. Claims 3, 12, 16, 20 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blahut and Budow as applied to claims 1, 10, 14, 18 and 22 above, and further in view of Hendricks et al. (Hendricks)(6,539,548).

As to claims 3, 12, 16, 20 and 24, while Blahut and Budow disclose wherein data streams are transmitted with an offset value, they fail to specifically disclose wherein the content providing server provides the programming offset value.

Hendricks discloses an Operations Center which transmits control information pertaining to near video on demand (such as offset values; column 4, lines 8-24) prior to transmission to a cable headend (column 6, lines 15-31) for the advantage of enabling a single site to remotely manage and control cable programming throughout a particular region (column 4, lines 14-20).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Blahut and Budow's system to include wherein the content providing server provides programming control information (such as programming offset values), as taught by Hendricks, for the advantage of enabling a single site to remotely manage and control cable programming throughout a particular region.

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6. Claims 4, 13, 17, 21 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blahut and Budow as applied to claims 1, 10, 14, 18 and 22 above, and further in view of Ganek et al. (Ganek)(5,724,646).

As to claims 4, 13, 17, 21 and 25, while Blahut and Budow disclose wherein a processor is arranged to transmit a plurality of data streams with an offset value, they fail to specifically disclose wherein the first data stream loops at least once.

Ganek discloses a near video on demand system where a program continuously transmits (loops) over a primary channel (Fig. 5b, column 1, lines 55-60) for the typical advantage of providing the video programming for an extended period of time.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify the combined system of Blahut and Budow to include wherein the first data stream loops at least once, as taught by Ganek, for the typical advantage of providing the video programming for an extended period of time.

7. Claims 5, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blahut in view of Budow, Debey, and Fluss (6,304,578).

As to claim 5, Blahut discloses a multicast server for streaming data (ITV Server, 120 and Headend Equipment, 101), comprising a **processor** unit (In ITV server, 120; column 3, lines 59-65), the processor unit being arranged to **receive** an incoming data stream corresponding to content (column 3, lines 38-58), wherein the processor unit is further arranged to **generate** at least a first and a second onward data streams for **transmission** to at least a first and second recipient subscribers (104), respectively

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(column 8, lines 38-45 and lines 50-56), in response to an incoming data stream (column 3, lines 38-42), wherein the at least first and second onward data streams correspond substantially to the content (column 8, lines 15-63) and are offset in time with respect to each other by a respective offset value (see Fig. 5). Blahut fails to disclose a storage device coupled to the processor for storing content, wherein the recipient subscribers are servers, and a router coupled to the processor.

Debey discloses a cable headend with a storage device (storage units, 76) coupled to a processor (master control unit, 74) which stores video data (column 14, lines 11-36) for the typical advantage of enabling programming to be stored for transmission at a later time.

Budow discloses a video distribution system wherein video broadcast from a distribution center (Fig. 1, 210) is received by a recipient server (Fig. 2, video server 12, column 6, lines 40-57) for the advantage of allowing customers more control over and interaction with the video programming (column 4, lines 44-48).

Fluss discloses a cable head end (Fig. 1, 103) which includes a router (105; column 4, lines 32-39) for the typical advantage of routing data packets to the appropriate users (column 4, lines 16-20).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Blahut's system to include a storage device for storing content, as taught by Debey, for the typical advantage of enabling programming to be stored for transmission at a later time.

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Additionally, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Blahut's system to include the use of recipient servers, as taught by Budow, for the advantage of allowing customers more control over and interaction with the video programming.

Additionally, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Blahut's system to include a router, as taught by Fluss, for the typical advantage of routing data packets to the appropriate users

As to claim 6, Fluss discloses wherein the router is arranged to transmit the at least the at least first and second onward data streams to the at least first and second recipient servers, respectively (see Fluss at column 4, lines 34-45).

As to claim 7, while Blahut, Budow, Debey and Fluss disclose the generating of first and second onward data streams, they fail to specifically disclose wherein data streams are generated prior to receipt of all of an incoming data stream.

Debey further discloses the transmission of digital programming streams (column 14, lines 22-36), received at A/V digitizing units, (72 in Fig. 7A, column 13 lines 64-67 and column 14, lines 1-21), which are generated prior to receipt of all of an incoming data stream (column 14, lines 22-36), for the typical advantage of transmitting live television feeds to viewers as they are received.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to further modify the combined system of Blahut, Budow, Debey

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and Fluss to include wherein data streams are generated prior to receipt of all of the incoming data stream, as further taught by Debey, for the typical advantage of transmitting live television feeds to viewers as they are received.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blahut, Budow, Debey and Fluss as applied in claim 5 above, and further in view of Hendricks et al. (Hendricks)(6,539,548).

As to claim 8, while Blahut, Budow, Debey and Fluss disclose wherein data streams are transmitted with an offset value, they fail to specifically disclose wherein the content providing server provides the programming offset value.

Hendricks discloses an Operations Center which transmits control information pertaining to near video on demand (such as offset values; column 4, lines 8-24) prior to transmission to a cable headend (column 6, lines 15-31) for the advantage of enabling a single site to remotely manage and control cable programming throughout a particular region (column 4, lines 14-20).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify the combined system of Blahut, Budow, Debey and Fluss to include wherein the content providing server provides programming control information (such as programming offset values), as taught by Hendricks, for the advantage of enabling a single site to remotely manage and control cable programming throughout a particular region.

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9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blahut, Budow, Debey and Fluss as applied in claim 5 above, and further in view of Ganek et al. (Ganek)(5,724,646).

As to claim 9, while Blahut, Budow, Debey and Fluss disclose wherein a processor is arranged to transmit a plurality of data streams with an offset value, they fail to specifically disclose wherein the first data stream loops at least once.

Ganek discloses a near video on demand system where a program continuously transmits (loops) over a primary channel (Fig. 5b, column 1, lines 55-60) which loops a television transmission continuously over television channels (Fig. 5b, column 1, lines 55-60) for the typical advantage of providing the video programming for an extended period of time.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify the combined system of Blahut, Budow, Debey and Fluss to include wherein the first data stream loops at least once, as taught by Ganek, for the typical advantage of providing the video programming for an extended period of time.

### Conclusion

10. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Sheleheda whose telephone number is (703) 305-8722. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the primary examiner, Chris Grant can be reached on (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-HELP.

James Sheleheda Patent Examiner Art Unit 2614

JS

CHRIS GRANT
PRIMARY EXAMINER